

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently amended) A computer-implemented method for selectively
2 auditing accesses to a relational database, comprising:
3 receiving a query for the relational database;
4 selectively auditing an access to the relational database,
5 wherein selectively auditing the access involves
6 automatically modifying the query prior to processing the query,
7 wherein processing the query causes an audit record to be
8 created and recorded only for rows in relational tables accessed by
9 the query and that satisfy an auditing condition,
10 wherein the auditing condition specifies a condition based on
11 a value of a field in a row in the relational database, and
12 wherein satisfying the auditing condition allows selective
13 auditing of the query,
14 processing the modified query to produce a query result, wherein
15 processing the modified query includes;
16 creating the auditing records only for rows in relational tables
17 accessed by the query and that satisfying the auditing condition, and
18 recording the audit record in an audit record store; and
19 returning the query result.

1 2 (Canceled).

1 3. (Previously presented) The method of claim 1, further comprising
2 ensuring the case statement is evaluated near the end of the query processing so the
3 case statement is evaluated only after other conditions of the query are satisfied.

1 4 (Canceled).

1 5. (Original) The method of claim 1, wherein if the query modifies at least
2 one entry in the relational database, using a relational database system trigger to
3 create and record the audit record for the modification to the relational database.

1 6 (Canceled).

1 7. (Original) The method of claim 1, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 8. (Original) The method of claim 1, wherein the auditing condition
2 includes a condition for a field within the relational database.

1 9. (Currently amended) A computer-readable storage medium storing
2 instructions to be executed by a computer causing the computer to perform a
3 method for selectively auditing accesses to a relational database, the method
4 comprising:
5 receiving a query for the relational database;
6 selectively auditing an access to the relational database,
7 wherein selectively auditing the access involves
8 | automatically modifying the query prior to processing the query,
9 wherein processing the query causes an audit record to be
10 created and recorded only for rows in relational tables accessed by

11 | the query and that ~~satisfying~~ an auditing condition,
12 | wherein the auditing condition specifies a condition based on
13 | a value of a field in a row in the relational database, and
14 | wherein satisfying the auditing condition allows selective
15 | auditing of the query,
16 | processing the modified query to produce a query result, wherein processing
17 | the modified query includes:
18 | creating the auditing records only for rows in relational tables
19 | accessed by the query and that ~~satisfying~~ the auditing condition, and
20 | recording the audit record in an audit record store; and
21 | returning the query result.

1 | 10 (Canceled).

1 | 11. (Previously presented) The computer-readable storage medium of claim
2 | 9, wherein the method further comprises ensuring the case statement is evaluated
3 | near the end of the query processing so the case statement is evaluated only after
4 | other conditions of the query are satisfied.

1 | 12. (Original) The computer-readable storage medium of claim 9, wherein
2 | the method further comprises retrieving the auditing condition for a given table
3 | from a data structure associated with the given table.

1 | 13. (Original) The computer-readable storage medium of claim 9, wherein if
2 | the query modifies at least one entry in the relational database, the method further
3 | comprises using a relational database system trigger to create and record the audit
4 | record for the modification to the relational database.

1 | 14 (Canceled).

1 15. (Original) The computer-readable storage medium of claim 9, wherein
2 the audit record includes:

3 a user name for a user making the query;
4 a time stamp specifying a time of the query; and
5 a text of the query.

1 16. (Original) The computer-readable storage medium of claim 9, wherein
2 the auditing condition includes a condition for a field within the relational database.

1 17. (Currently amended) An apparatus for selectively auditing accesses to a
2 relational database, comprising:

3 a receiving mechanism configured to receive a query for the relational
4 database;

5 a selective auditing mechanism configured to selectively audit an access to
6 the relational database,

7 wherein selectively auditing the access involves

8 automatically modifying the query prior to processing the query,

9 wherein processing the query causes an audit record to be

10 created and recorded only for rows in relational tables accessed by
11 the query and satisfying an auditing condition,

12 wherein the auditing condition specifies a condition based on
13 a value of a field in a row in the relational database, and

14 wherein satisfying the auditing condition allows selective
15 auditing of the query,

16 a query processor configured to process the modified query to produce a
17 query result, wherein processing the modified query includes:

18 creating the auditing records only for rows in relational tables

19 accessed by the query and that ~~satisfying~~ the auditing condition, and

20 recording the audit record in an audit record store; and

21 a returning mechanism configured to return the query result.

1 18 (Canceled).

1 19. (Previously presented) The apparatus of claim 17, wherein the query
2 modification mechanism is configured to ensure the case statement is evaluated
3 near the end of the query processing so the case statement is evaluated only after
4 other conditions of the query are satisfied.

1 20. (Original) The apparatus of claim 17, wherein the query modification
2 mechanism is configured to retrieve the auditing condition for a given table from a
3 data structure associated with the given table.

1 21. (Original) The apparatus of claim 17, wherein if the query modifies at
2 least one entry in the relational database, the apparatus uses a relational database
3 system trigger to create and record the audit record for the modification to the
4 relational database.

1 22 (Canceled).

1 23. (Original) The apparatus of claim 17, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 24. (Original) The apparatus of claim 17, wherein the auditing condition
2 includes a condition for a field within the relational database.

1 25. (Previously presented) The method of claim 1, further comprising
2 retrieving the auditing condition for a given table from a data structure associated
3 with the given table.

1 26. (Currently amended) A computer-implemented method for selectively
2 auditing accesses to a relational database, comprising:
3 receiving a database operation for the relational database;
4 selectively auditing an access to the relational database based on an
5 auditing condition, wherein the auditing condition specifies a condition based on a
6 value of a field in a row in the relational database;
7 processing the database operation to produce a database operation result,
8 wherein processing the database operation includes:
9 creating the auditing records only for selected rows in the
10 relational database that are accessed by the database operation;
11 ~~wherein the selected rows~~ and that satisfy the auditing condition,
12 and
13 recording the audit record in an audit record store; and
14 returning the database operation result;
15 wherein selectively auditing the access involves automatically modifying
16 the database operation prior to processing the database operation,
17 wherein satisfying the auditing condition allows selective auditing of the
18 database operation and not for other rows;
19 wherein satisfying the auditing condition allows selective auditing of the
20 database operation;
21

1 27 (Canceled).

1 28. (Previously presented) The method of claim 26, wherein the auditing
2 condition includes a condition for at least two fields within the relational database.

1 29. (Currently amended) A computer-readable storage medium storing

2 instructions that when executed by a computer cause the computer to perform a
3 method for selectively auditing accesses to a relational database, the method
4 comprising:
5 receiving a database operation for the relational database;
6 selectively auditing an access to the relational database based on an
7 auditing condition, wherein the auditing condition specifies a condition based on a
8 value of a field in a row in the relational database;
9 processing the database operation to produce a database operation result,
10 wherein processing the database operation includes:
11 creating the auditing records only for selected rows in the
12 relational database that are accessed by the database operation;
13 ~~wherein the selected rows~~ and that satisfy the auditing condition,
14 and
15 recording the audit record in an audit record store; and
16 returning the database operation result;
17 wherein selectively auditing the access involves automatically modifying
18 the database operation prior to processing the database operation,
19 wherein satisfying the auditing condition allows selective auditing of the
20 database operation and not for other rows;
21 wherein satisfying the auditing condition allows selective auditing of the
22 database operation;

23

1 30 (Canceled).

1 31. (Previously presented) The computer-readable storage medium of
2 claim 29, wherein the auditing condition includes a condition for at least two
3 fields within the relational database.

1 32. (Currently amended) An apparatus for selectively auditing accesses to
2 a relational database, comprising:
3 a receiving mechanism configured to receive a database operation for the
4 relational database;
5 a selective auditing mechanism configured to selectively audit an access to
6 the relational database based on an auditing condition, wherein the auditing
7 condition specifies a condition based on a value of a field in a row in the relational
8 database;
9 a processing mechanism configured to process the database operation to
10 produce a database operation result;
11 | a creating mechanism configured to create the auditing records only for
12 selected rows in the relational database that are accessed by the database
13 | operation, ~~wherein the selected rows~~ and that satisfy the auditing condition, and
14 a recording mechanism configured to record the audit record in an audit
15 record store; and
16 a returning mechanism configured to return the database operation result;
17 wherein selectively auditing the access involves automatically modifying
18 | the database operation prior to processing the database operation,
19 wherein satisfying the auditing condition allows selective auditing of the
20 database operation and not for other rows;
21 wherein satisfying the auditing condition allows selective auditing of the
22 | database operation;
23 | :

1 33 (Canceled).

1 34. (Previously presented) The apparatus of claim 32, wherein the auditing
2 condition includes a condition for at least two fields within the relational database.